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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,775	10/26/2000	Paul G. Milazzo	WMI-004CN4 (8415/5)	5306

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EXAMINER

KOENIG, ANDREW Y

ART UNIT	PAPER NUMBER
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2611

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/697,775

Applicant(s)

MILAZZO ET AL.

Examiner

Andrew Y Koenig

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52,54-66,68-79,81-83,95-99 and 111-119 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52,54-66,68-79,81-83,95-99,111,113,114,116,117 and 119 is/are rejected.
- 7) ☒ Claim(s) 112,115 and 118 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 52, 54-66, 68-79, 81-83, 95-99, 111-119 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

2. Claims 112, 115, and 118 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior art of record fails to show or fairly suggest a sixth data structure element further associated with a visibility indicia indicative of whether the plurality of object in the video frame are enabled for being visually identified for a particular video shot. Kaiser teaches the sixth data structure element, but is silent on having a visibility indicia for enabling display. Kitsukawa teaches three modes, wherein the selection of the mode will determine whether to product should be displayed or prevented from being displayed (Kitsukawa: col. 6-7, ll. 65-7). However, there is no motivation to combine the modes of Kitsukawa into the sixth data structure of Kaiser for presenting or preventing the display of content, in that the sixth data structure of Kaiser is transmitted to the user and the modes of Kitsukawa are local to that particular device. The examiner notes that the first data structure of claim 118 is the sixth data structure of claims 112 and 115.

Claim Objections

Art Unit: 2611

3. Claims 54, 55, 68, 69, and 81 are objected to because of the following informalities:

Claim 54 recites the limitation ""said timing data indicator" in line 2. There is insufficient antecedent basis for this limitation in the claim. Further claim 54 depends from claim 53, which is cancelled. Accordingly, for the rest of this Office Action, claim 54 will depend from claim 52, will be interpreted as: "The system of claim 52 further comprising at least one timing data indicator associated with at least one of said plurality of data structure elements, wherein said timing data indicator indicates an expiration time. "

Claim 55 recites the limitation ""said timing data indicator" in line 2. There is insufficient antecedent basis for this limitation in the claim. Further claim 55 depends from claim 53, which is cancelled. Accordingly, for the rest of this Office Action, claim 54 will depend from claim 52, will be interpreted as: "The system of claim 52 further comprising at least one timing data indicator associated with at least one of said plurality of data structure elements, wherein said timing data indicator indicates an activation time. "

Claim 68 recites the limitation ""said timing data indicator" in line 2. There is insufficient antecedent basis for this limitation in the claim. Further claim 68 depends from claim 67, which is cancelled. Accordingly, for the rest of this Office Action, claim 68 will depend from claim 66, will be interpreted as: "The method of claim 66 further comprising at least one timing data indicator associated with at least one of said

Art Unit: 2611

plurality of data structure elements, wherein said timing data indicator indicates an expiration time. “

Claim 69 recites the limitation “said timing data indicator” in line 2. There is insufficient antecedent basis for this limitation in the claim. Further claim 69 depends from claim 67, which is cancelled. Accordingly, for the rest of this Office Action, claim 69 will depend from claim 66, will be interpreted as: “The method of claim 66 further comprising at least one timing data indicator associated with at least one of said plurality of data structure elements, wherein said timing data indicator indicates an activation time. “

Claim 81 recites the limitation “the timing data indicator” in lines 4-5. There is insufficient antecedent basis for this limitation in the claim. Further claim 81 depends from claim 80, which is cancelled. Accordingly, for the rest of this Office Action, claim 81 will depend from claim 52, will be interpreted as: “The system of claim 52 further comprising at least one timing data indicator associated with at least one of said plurality of data structure elements, wherein [the image overlay data is associated with first timing data,] presentation of the image overlay is [being] synchronized with the video frame based on the first timing data indicator.”

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2611

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 52, 55-59, 61-66, 69-73, 75-82, 95-98, 111, 113, 114, and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,615,408 to Kaiser et al. (Kaiser) in view of U.S. Patent 5,889,746 to Moriyama et al. (Moriyama) and U.S. Patent 6,282,713 to Kitsukawa et al. (Kitsukawa).

Regarding claims 52 and 66, Kaiser teaches placement zones (as shown in figure 2), which has a reference to an object in the video frame (Abstract), which equates to a first annotation data structure element that includes an object reference to an object in the video frame. Kaiser teaches a trigger zone which contains a Uniform Resource Identifier (URI), which equates to a second annotation data structure element referenced by the first identifier and including a set of data references (col. 6, ll. 34-39). Kaiser teaches the URI being identified by the object in that the URI has a "<videoprod>" field which is not temporally unique into which the trigger is embedded (col. 6, ll. 43-64). However, Kaiser is silent on the first annotation element identifying the second element as claimed. Moriyama teaches identifying elements via pointers, as shown in figure 9. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by identifying a second element via a pointer as taught by Moriyama in order to efficiently manage dynamic resources. Further, Kaiser discloses that the image area (described using a placement zone) is referenced by some form of an identifier in order to link actions to the image (col. 10, ll. 1-8). Kaiser teaches a singular object in the video frame indicating the information

Art Unit: 2611

with an HTML table (which equates to a sixth data structure element) (col. 10, ll. 20-30), but is silent on storing image overlay data for a plurality of objects in the video frame, and in response to a user command visually identifying one of the plural objects.

Kitsukawa teaches providing advertising information from numerous items in a program scene (fig. 5, labels 521-529, col. 8, ll. 23-36), wherein in response to the advertisement mode selected (col. 6-7, ll. 65-2) by a user, the program visually identifies at least one of the plurality of objects in the video frame based on the overlay data (col. 7, ll. 3-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by storing image overlay data for a plurality of objects in the video frame, and in response to a user command visually identifying one of the plural objects as taught by Kitsukawa in order to provide an innovative and user friendly access to a wealth of information regarding goods and services through the broadcasting system (Kitsukawa: col. 4, ll. 15-17).

Regarding claims 55 and 69, Kaiser teaches placing the placement zones in the video stream (fig. 2), which reads on a timing data indicator associated with the at least one of said plurality of data structure elements. Kaiser teaches placing the placement zones in the video stream (fig. 2), which indicates an activation time.

Regarding claims 56 and 70, Kaiser teaches the placement zones associated with a set of video frames (fig. 2, col. 6, ll. 18-33), further the trigger is associated with the placement zones and consequently is associated with the video program, given the broadest reasonable interpretation of associated.

Regarding claims 57 and 71, Kaiser is silent on the elements being transmitted separately. Official Notice is taken separately sending data in MPEG is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by sending the elements separately in order to send data that is larger than the data packets thereby using the existing infrastructure to transmit packets.

Regarding claims 58 and 72, Kaiser teaches a trigger which is used to display the action being performed fig. 6A-6b, which reads on the first set of annotation references including a data field. However, Kaiser is silent on a second identifier referencing a third annotation data structure element. Official Notice is taken that the use of pointers is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser to implement a pointers (which reads on a reference) in order to access another portion of a data structure thereby providing a system that efficiently manages variable length data structures and increasing the robustness of the system.

Regarding claims 59 and 73, Kaiser is silent on the annotation data field is a title data field and the third data structure element is a string including the title of the object. Moriyama teaches a pointer to a text string wherein the text string can be the title (col. 15-16, ll. 65-31; see also fig. 9). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by pointing to a string including the title as taught by Moriyama in order to efficiently manage variable length fields and manage the memory of the system.

Regarding claims 61, 62, 75, and 76, Kaiser is silent on a variable parameter field and a variable value. Official Notice is taken that a variable parameter field and variable values are well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by using a variable parameter field and variable values in order to efficiently manage the memory by dynamically referencing and allocating the memory.

Regarding claims 63 and 77, Kaiser is silent on never duplicating the first and second identifiers. Official Notice is taken that never duplicating identifiers is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by never duplicating identifiers in order to appropriately reference the appropriate information thereby eliminating access to the incorrect data structure.

Regarding claims 64 and 78, Kaiser teaches location and shape information, which equates to a sixth data structure element (fig. 6B, col. 6, ll. 20-41).

Regarding claims 65 and 79, Kaiser teaches that the sixth data structure is associated with a video frame (see fig. 2).

Regarding claims 80 and 96, Kaiser teaches a visual highlight of an image as an overlay (see fig. 6B, label 6500, col. 10, ll. 20-41), which is in the form of an HTML table, which equates to a third data structure storing image overlay data, but is silent on displaying in response to a user command. Official Notice is taken that customizing interfaces based on user preferences is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to

Art Unit: 2611

modify Kaiser by customizing the interfaces in order to control the highlighted portions of Kaiser thereby enabling the user to further customize their viewing environment.

Regarding claims 81 and 97, Kaiser teaches the image overlay data is associated with time data and synchronized to the video frames (col. 10, ll. 20-41).

Regarding claims 82 and 98, Kaiser teaches identifying the object (col. 10, ll. 20-41, fig. 6B), but Kaiser is silent on determining the difference from the a first time and the current time to initiate the event. Official Notice is taken that determining the difference in time to perform an event is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by determining the difference in time to perform an event in order to efficiently manage events thereby reducing the processing of the system by selectively querying the system clock.

Regarding claim 95, Kaiser teaches a video production (1100), which reads on a first processor for creating the data structures, such as a DVD (col. 5, ll. 1-7). Kaiser teaches placement zones (as shown in figure 2), which has a reference to an object in the video frame (Abstract), which equates to a first annotation data structure element that includes and object reference to an object in the video frame. Kaiser teaches a visual highlight of an image as an overlay (see fig. 6B, label 6500, col. 10, ll. 20-41), which is in the form of an HTML table, which equates to a third data structure, which reads on the third data structure. Kaiser teaches a trigger zone which contains a Uniform Resource Identifier (URI), which equates to a second annotation data structure element referenced by the first identifier and including a set of data references (col. 6, ll.

Art Unit: 2611

34-39). Kaiser teaches the URI being identified by the object in that the URI has a "<videoprod>" field which is not temporally unique into which the trigger is embedded (col. 6, ll. 43-64). However, Kaiser is silent on the first annotation element identifying the second element and third element as claimed. Moriyama teaches identifying elements via pointers, as shown in figure 9. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by identifying a second and third element via a pointer as taught by Moriyama in order to efficiently manage dynamic resources. Further, Kaiser discloses that the image area (described using a placement zone) is referenced by some form of an identifier in order to link actions to the image (col. 10, ll. 1-8). Kaiser teaches the image overlay data is associated with time data and synchronized to the video frames (col. 10, ll. 20-41). Kaiser teaches a singular object in the video frame indicating the information with an HTML table (which equates to a sixth data structure element) (col. 10, ll. 20-30), but is silent on storing image overlay data for a plurality of objects in the video frame, and in response to a user command visually identifying one of the plural objects. Kitsukawa teaches providing advertising information from numerous items in a program scene (fig. 5, labels 521-529, col. 8, ll. 23-36), wherein in response to the advertisement mode selected (col. 6-7, ll. 65-2) by a user, the program visually identifies at least one of the plurality of objects in the video frame based on the overlay data (col. 7, ll. 3-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by storing image overlay data for a plurality of objects in the video frame, and in response to a user command visually identifying one

Art Unit: 2611

of the plural objects as taught by Kitsukawa in order to provide an innovative and user friendly access to a wealth of information regarding goods and services through the broadcasting system (Kitsukawa: col. 4, ll. 15-17).

Regarding claims 111, 114, and 117, Regarding claims 53 and 67, Kaiser teaches placing the placement zones in the video stream (fig. 2), which reads on a timing data indicator in association with one of the data structure elements, which synchronizes the display of the mask with the video frame based on the retrieved time data indicator.

Regarding claim 113, 116, and 119, Kaiser is silent on a plurality of objects being identified in sequence in response to one or more user commands. Kitsukawa teaches cursor direction keys for controlling cursor movement on the display (col. 4, ll. 46-54) for navigating to plural objects in the display (fig. 5, labels 521-529, col. 8, ll. 23-36), however both Kaiser and Kitsukawa are silent on the objects are visually identified in sequence in response to one or more user commands. Official Notice is taken that sequencing through objects in response to user commands is well known, such as in the analogous personal computer art of using "tab" to navigate around a GUI or in the television art of using a cursor to navigate through menus. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser and Kitsukawa by as taught by visually identifying objects in sequence in order to effectively provide a means to the user to select a device or desired product thereby simplifying the selection process.

Art Unit: 2611

6. Claims 54, 68, 83, and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,615,408 to Kaiser et al. (Kaiser), U.S. Patent 5,889,746 to Moriyama et al. (Moriyama) and U.S. Patent 6,282,713 to Kitsukawa et al. (Kitsukawa) in view of U.S. Patent 6,415,438 to Blackketter et al. (Blackketter).

Regarding claims 54 and 68, Kaiser teaches placing the placement zones in the video stream (fig. 2), which reads on a timing data indicator associated with the at least one of said plurality of data structure elements. Kaiser is silent on indicating an expiration time. Blackketter teaches expiring triggers (col. 3, ll. 13-22, col. 10, ll. 24-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by indicating an expiration time in order to ignore invalid triggers (Blackketter: col. 10, ll. 24-35).

Regarding claims 83 and 99, Kaiser is silent on indicating an expiration time. Blackketter teaches expiring triggers, which are indicative of the last instance the data structure is used (col. 3, ll. 13-22, col. 10, ll. 24-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser by indicating an expiration time in order to ignore invalid triggers (Blackketter: col. 10, ll. 24-35). Kaiser and Blackketter are silent on removing the data structures. Official Notice is taken that removing expired information is well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kaiser and Blackketter by removing the data structures in order to conserve memory and efficiently manage the memory resources.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Y Koenig whose telephone number is (703) 306-0399. The examiner can normally be reached on M-Th (7:30 - 6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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